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(54) Game-playing machines

(57) A fruit machine comprises a control system 1 which supplies drive signals to reels 2 bearing symbols during a main game to cause the reels 2 to rotate

at a normal speed such that the symbols appear blurred to the player in response to actuation of a game-initiating button 3 and to come to rest with a combination of symbols in a viewing zone. If this combination is a winning combination a prize is awarded whereas, if it is a feature combination, a slow-spin feature is made available to the player by a feature selector 6. When the slow-spin feature is made available the player may depress a slow-spin initiating button 7 and the reels are then caused to be spun at a slow speed by a normal/slow speed selector 8 such that the symbols can be individually identified as the reels 2 rotate. The player may stop the reels 2 rotating one at a time by depressing stop buttons 9 with the object of obtaining a winning combination in the viewing zone. Alternatively the slow-spin feature may be associated with one or more reels which differ from the reels which are spun during a main game.

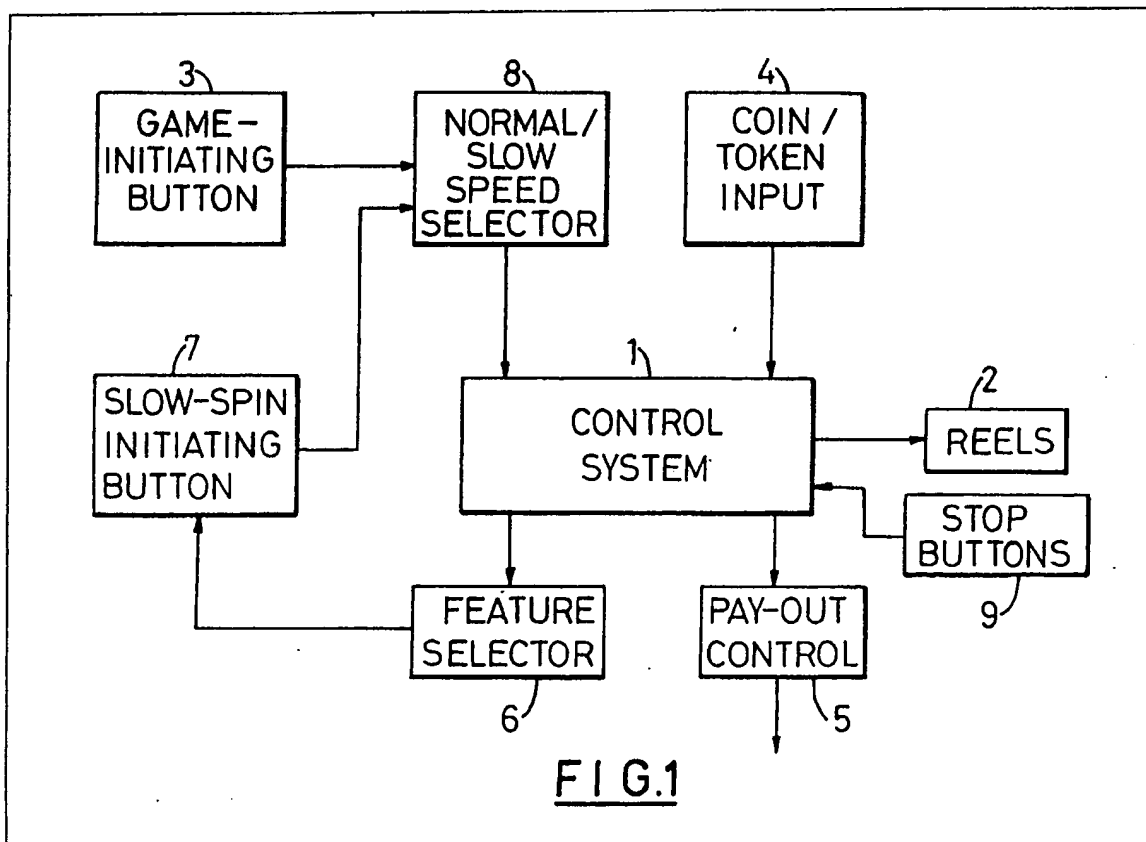
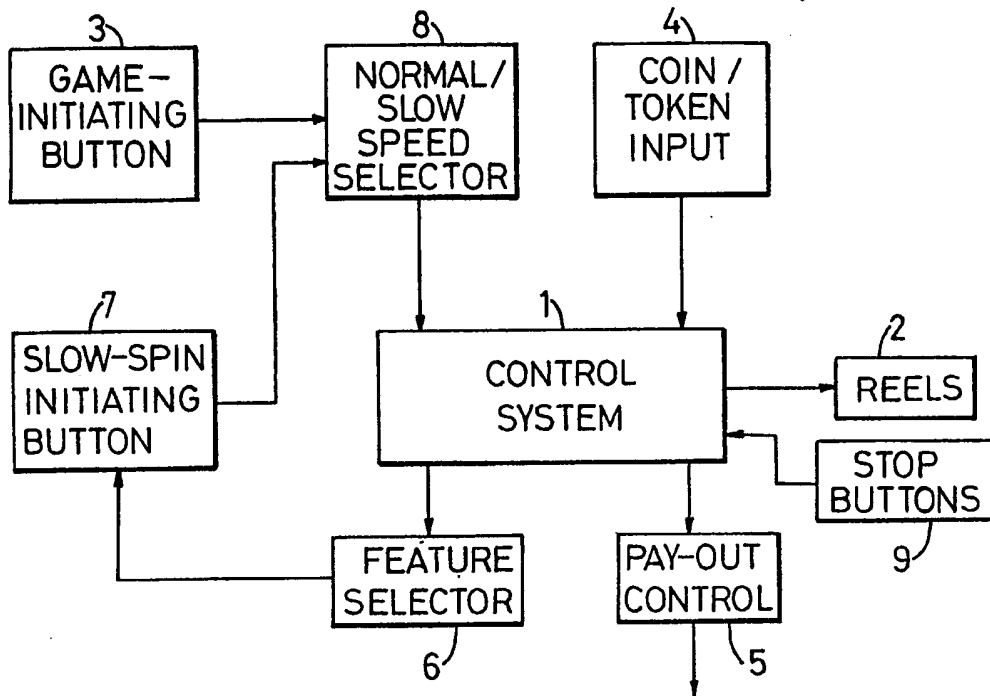
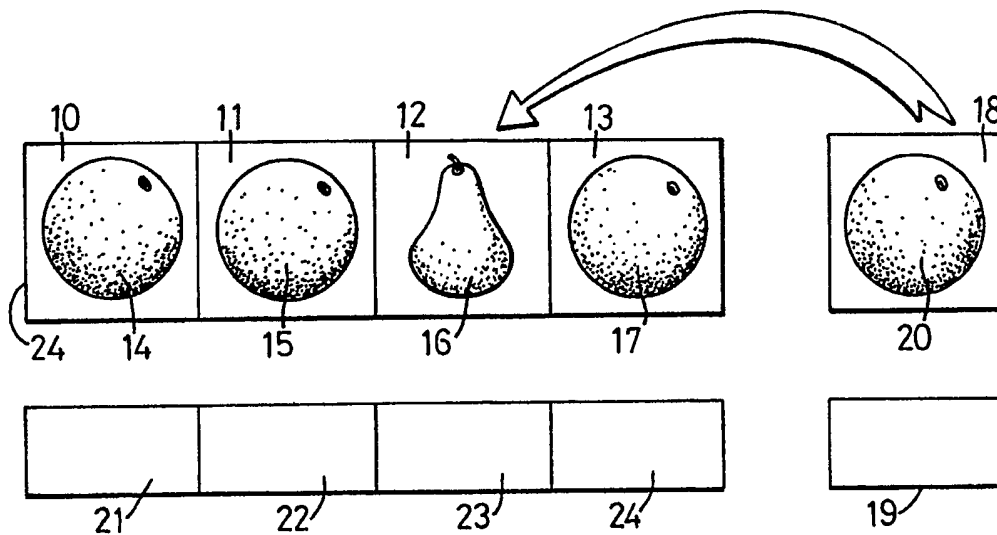


FIG. 1

The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy.

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FIG. 1FIG. 2

SPECIFICATION

Game-playing machines

- 5 This invention relates to game-playing machines, such as those known as "fruit-machines".

Fruit machines conventionally incorporate three or more rotary members, such as reels or strips, disposed side-by-side and bearing symbols view-
 10 able in a viewing zone, or a representation of such rotary members, referred to hereafter as "quasi-rotary members", on a video or projection screen. The symbols generally represent various fruits, although it will be understood that the term "fruit
 15 machine" may be applied to machines having rotary members bearing symbols other than fruits. During a game the rotary members are spun or appear to be spun in response to actuation of a game-initiating button by a player after a coin, token or credit has
 20 been paid into the machine, and the rotary members subsequently come to rest in random positions indicated by a combination of symbols in the viewing zone. Alternatively the machine may comprise display units, such as an array of lights,
 25 adapted to display the symbols, and means for cyclically changing the symbols displayed by the units. The combination of symbols visible in the viewing zone is then compared with a number of prize-winning combinations, and a prize is awarded
 30 if a match is found. In addition to the normal game a number of game features, such as "hold" and "nudge", may be made available to the player by such machines in order to increase the chances of obtaining a prize.

- 35 It is an object of the invention to provide such a machine with an entirely novel game feature which will improve the player appeal of the machine.

According to the invention a game-playing machine comprises a plurality of rotary or quasi-
 40 rotary members bearing symbols, or a plurality of display units adapted to display symbols, and capable of being cycled to change the symbols displayed, indexing means which, when actuated, causes at least one of the rotary members to be rotated, or at
 45 least one of the display units to be cycled, and to come to rest with a combination of symbols in a viewing zone, and speed selection means for causing the indexing means, when actuated, to operate in one of two or more possible speed states.

- 50 Preferably the speed selection means is adapted to select one of two speed states, that is a normal speed state and a slow speed state. The normal speed state will generally be a state in which the rotary members or display units are rapidly caused
 55 to rotate or cycle at a relatively fast speed such that the symbols appear blurred to the player, whereas the slow speed state will generally be a state in which the rotary members or display units rotate or cycle for at least part of the time at a relatively slow
 60 speed such that the individual symbols can be seen clearly by the player. The slow speed state may correspond to a substantially constant slow speed or to an intermittent slow speed, for example where the speed fluctuates gradually between a relatively slow
 65 rate and a relatively fast rate.

Where the machine is a fruit machine, the normal speed state may correspond to the speed at which the rotary members are normally spun, or the display units are normally cycled, during a main
 70 game in response to actuation of a game-initiating switch, and the slow speed state may become available as a game feature, for example on a random basis or as a result of a particular combination of symbols within the viewing zone. The slow
 75 speed state may be actuable by the normal game-initiating switch or a special control.

In a development of the invention the indexing means is arranged to index at least one rotary member or display unit of a first set of one or more
 80 rotary members or display units when caused to operate in a first speed state, and to index at least one rotary member or display unit of a second set of one or more rotary members or display units, which differ from the or each rotary member or display unit
 85 of the first set, when caused to operate in a second speed state. The first set may comprise three or more main rotary members or display units, and the second set may comprise an auxiliary rotary member or display unit.

90 A jump feature is preferably associated with this development whereby jump-initiating means is provided for transferring a selected symbol on the auxiliary rotary member or display unit to that
 95 portion of one of the main rotary members or display units which is in the viewing zone. The jump-initiating means may comprise a respective jump-initiating switch associated with each main rotary member or display unit which, when actuated
 100 by the player, causes the selected symbol on the auxiliary rotary member or display unit to be transferred to that portion of the associated main rotary member or display unit which is in the viewing zone.

In addition stop means are preferably associated
 105 with the rotary member(s) or display unit(s) which are indexed by the indexing means when operating in the slow speed state to enable the player to stop the rotary member(s) or display unit(s) when being indexed at the slow speed. Thus the player may
 110 attempt to stop the or each rotary member or display unit such that a winning combination results in the viewing zone. For example, the stop means may comprise a respective stop switch associated with each of three or more rotary members or display
 115 units arranged to be indexed at the slow speed by the indexing means so as to enable the player to stop the associated rotary member or display unit when being indexed at the slow speed.

In order that the invention may be more fully
 120 understood, two fruit machines in accordance with the invention will now be described, by way of example, with reference to the accompanying drawing, in which:

Figure 1 is a block diagram of a first machine; and
 125 *Figure 2* is a diagrammatic representation of the viewing window of a second machine.

The machine of *Figure 1* includes a control system 1 which incorporates a microprocessor and is of the type described in Patent Specification No. 1,550,732.
 130 This control system 1 controls four reels 2 in

dependence on depression of a game-initiating button 3 and various game-feature buttons by the player. When a coin or token is introduced into a coin/token input 4 of the machine and the game-initiating button 3 is depressed by the player, the reels 2 are caused to be spun by the control system 1 at a normal speed such that the symbols appear blurred to the player before coming to rest one at a time and in a particular order in accordance with the usual convention. Each reel is driven by the appropriate amount by a respective drive signal supplied by the control system 1, and the combination of symbols on the combination line when the reels have stopped is computed directly from the drive signals and compared with the possible prize-winning combinations. In the event of a match a prize is awarded by a pay-out control 5.

When the combination of symbols on the combination line is one of a number of possible feature combinations as determined by a feature selector 6, the player is given the option of depressing a slow-spin initiating button 7. Depression of the button 7 triggers a normal/slow speed selector 8 so as to cause the reels 2 to be spun by the control system 1 at a slow speed such that the symbols can be individually identified as the reels 2 rotate. The player may then stop the reels 2 rotating one at a time by depressing stop buttons 9 associated with the reels 2, the object being to stop the reels 2 in such positions that the resulting combination of symbols on the combination line corresponds to a winning combination for which a prize is awarded.

The machine of Figure 2 comprises four main reels 10 to 13 for displaying a combination line of symbols 14 to 17 in a viewing window 24 when the reels have stopped rotating at a normal speed during a main game. In the particular example illustrated the symbols 14, 15 and 17 are oranges and the symbol 16 is a pear. If the symbol 16 was also an orange this would correspond to a winning combination. However, the player may be given a chance of changing the symbol 16 to an orange if a slow-spin feature is made available by the machine. In this case an auxiliary reel 18 will be automatically spun at a slow speed such that the symbols on the reel 18 are individually identifiable, and the player may then stop the reel 18 by depressing a stop button 19, the object being to stop the reel 18 in such a position that the symbol 20, in this case an orange, required to complete the winning combination in the viewing window 24 is aligned with the window 24 when the reel 18 stops. The player may cause the symbol 20 to be transferred to the main reel 12 in the viewing window 24 by depressing an appropriate one of four jump buttons 21 to 24 associated the reels 10 to 13. This gives the winning combination and a prize is then awarded.

CLAIMS

1. A game-playing machine comprising a plurality of rotary or quasi-rotary members bearing symbols, or a plurality of display units adapted to display symbols and capable of being cycled to change the symbols displayed, indexing means which, when

actuated, causes at least one of the rotary members to be rotated, or at least one of the display units to be cycled, and to come to rest with a combination of symbols in a viewing zone, and speed selection means for causing the indexing means, when actuated, to operate in one of two or more predetermined speed states.

2. A game-playing machine according to claim 1, wherein the speed selection means is adapted to select one of two possible speed states.

3. A game-playing machine according to claim 1 or 2, wherein the speed selection means is adapted to select a normal speed state and a slow speed state.

4. A game-playing machine according to claim 3, being a fruit machine, wherein the normal speed corresponds to the speed at which the rotary members or display units are indexed during a main game in response to actuation of a game-initiating switch.

5. A game-playing machine according to claim 3 or 4, wherein stop means is associated with the rotary member(s) or display unit(s) which are indexed by the indexing means when operating in the slow speed state to enable the player to stop the rotary member(s) or display unit(s) when being indexed at the slow speed.

6. A game-playing machine according to any preceding claim, wherein the indexing means is arranged to index at least one rotary member or display unit of a first set of one or more rotary members or display units when caused to operate in a first speed state, and to index at least one rotary member or display unit of a second set of one or more rotary members or display units, which differ from the or each rotary member or display unit of the first set, when caused to operate in a second speed state.

7. A game-playing machine according to claim 6, wherein the first set comprises three or more main rotary members or display units, and the second set comprises an auxiliary rotary member or display unit.

8. A game-playing machine according to claim 7, wherein jump-initiating means is provided for transferring a selected symbol on the auxiliary rotary member or display unit to that portion of one of the main rotary members or display units which is in the viewing zone.

9. A game-playing machine according to claim 8, wherein the jump-initiating means comprises a respective jump-initiating switch associated with each main rotary member or display unit which, when actuated by the player, causes the selected symbol on the auxiliary rotary member or display unit to be transferred to that portion of the associated main rotary member or display unit which is in the viewing zone.

10. A game-playing machine according to claim 5, wherein the stop means comprises a respective stop switch associated with each of three or more rotary members or display units arranged to be indexed at the slow speed by the indexing means so as to enable the player to stop the associated rotary member or display unit when being indexed at the

slow speed.

11. A game-playing machine substantially as hereinbefore described with reference to the accompanying drawing.

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